

## BOOK REVIEWS

**Standardized Plant Names**

Standardized Plant Names. Edited by Harlan P. Kelsey and William A. Dayton, for American Joint Committee on Horticultural Nomenclature. Second Edition. Pp. 675. Harrisburg, Pa.; J. Horace McFarland Company, 1942. \$10.00.

The second edition of *Standardized Plant Names* is nearly twice as large as the first edition, 1923. It was the aim to include in the new edition the names of all plants of any economic or social value to man and this has extended the total to "approximately 90,000 separate entries of plant and plant product names." The new volume is of primary value and interest in regard (1) to the standardization of names and (2) to the "innovations" in the nomenclature, the most important of which recognize the distinctions between (a) true species (b) groups of hybrids (named "polybrids") and (c) clones.

The botanical names of genera and of their species are listed alphabetically and the "approved" scientific names are printed in bold-face type while synonyms or unapproved names are in italics. Common names for species and polybrids are in small capitals as are the names of clones. Names of polybrids are distinguished from names of species by a symbol ( $\infty$ ) and the names of clones from common names of species and polybrids by another symbol ( $\text{€}$ ).

In making decisions on approved scientific names there were numerous collaborators and it is stated that it was the aim to apply these names in accord with International Rules of Botanical Nomenclature. In many cases when there is uncertainty in the application of synonyms the authority is given; but authorities are not cited for the names that are approved.

In any list of species names which is without either descriptions or citation of authorities the identity of the group of plants to which any name applies is not indicated. Hence the person who consults *Standardized Plant Names* in regard to any name must either have a knowledge of what that name applies to or be able to obtain this information from other sources. If one has this knowledge for at least one of the botanical names listed or for the one common name that is given he can learn what the approved scientific name is.

For example, one learns that the generic name *Amaryllis* is preferred to the name *Hippeastrum* and that the species name *Hemerocallis Thunbergii* is approved instead of the name *Hemerocallis serotina*. In respect to the standardization of scientific names the volume should be of value to gardeners and nurserymen.

In recognizing the clone and the polybrid the Editorial Committee of *Standardized Plant Names* renders a somewhat belated service to both botany and horticulture. In the first edition these distinctions were not made. That the rules of botanical nomenclature adopted to date are inadequate in application to cultivated plants has been noted in various publications and also in the deliberations and recommendations of the International Committee for Horticultural Nomenclature.

It has long been recognized that all members of a clone have collectively only the status of an individual. Methods of vegetative propagation, especially for perennial plants, have made the clone an important and very general horticultural unit. The term "clon" was proposed in 1903 but recently most writers have used the spelling "clone." The Editorial Committee of *Standardized Plant Names* wishes to give the spelling that was first proposed preference over that in recent general usage; but does not hesitate to offer many new changes in the spelling and the pronunciation of other terms.

The heterogenic nature of many groups of cultivated plants has been emphasized by genetical studies as well as by the experiences of gardeners. Often this condition arises after hybridization but it is more or less developed in the population of any species. If seed-reproduction is the rule for a group of hybrids, as in *Petunia*, there is usually segregation into true-breeding varieties each of which deserves a distinctive name. But for most perennial plants the polybrid group is soon separated into clones each of which deserves a clonal name. In horticulture a polybrid group is a rather temporary and variable group in comparison to the clone.

The horticultural varieties grown from seed are not listed in *Standardized Plant Names* for certain genera; as, for example, *Petunia* and *Zinnia*. But extensive lists of seed-grown varieties are given for barley, oats, flax, rye, wheat, sorghum, and other agricultural plants.

The Editorial Committee of *Standardized Plant Names* recommends that there be "one standard common name for each plant." In reference to the names of species and true varieties the term "plant" really refers to a group of individuals of successive seed grown generations. When two or more common names are in use for a group of plants only one is approved. Numerous new common names have been improvised. Numerous double names and hyphenated names in common use have been reduced to a single word; as, Lilyofthevalley, Jerusalemartichoke, etc.

There is much information concerning plants available in *Standardized Plant Names*. For any genus of plants one may learn how many species, varieties, polybrids, and clones are listed as important to man. In numerous genera the horticultural clones are segregated and listed by common names and the names of the originators are given (see *Aster*, *Begonia*, *Azalca*, *Heumerocallis*, etc.). There is a list of plant patents with an index of the plants involved. Lists are given of poisonous plants, range plants, state flowers and trees, fiber plants, herb garden plants, and other groups of plants that have special interest. These lists are useful as a basis for obtaining specific information in descriptive literature.

In the designation of species, of clones, and of polybrids in *Standardized Plant Names* there are numerous inaccuracies. Especially are many definitely recognized clones listed as polybrids or even as species; but in most cases this treatment follows that of some manual. This condition is illustrated in the nomenclature suggested for the genus *Populus*. At this time this reviewer wishes to record that the statement made in *Standardized Plant Names* that he collaborated in deciding the nomenclature presented for the genus *Populus* is an error.

Criticism of the volume is to some degree tempered when one reads the following statements in the preface: "*Standardized Plant Names* adopts the rule that species and natural varieties only are entitled to Latin or botanical names and that all hybrids, clones, polybrids, horticultural varieties and the like should receive suitable English or common names. . . . Time and other serious handicaps make it impossible for the Editors to consistently carry out these principles. Yet reasonable progress has been made and it is hoped

a later edition may see all necessary changes made in conformity with this beginning."

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A. B. STOUT

### The Years of John Torrey

John Torrey. A story of North American botany. By Andrew Denny Rodgers, III. 352 pp. Princeton University Press. 1942. \$3.75.

The journey of the Astorians during 1811 and 1812 began a notable period in the exploration of western North America;— notable for many reasons, among which we may reckon the presence of two well known naturalists. Subsequent expeditions (mostly under the auspices of the United States Government) likewise included natural history among the fields to be explored; the collection and description of the plants and animals and other products of the country supplemented their purely geographical work. Specimens flowed eastward in an increasing tide for identification and preservation. Fortunately the prolixity of nature and the zeal of collectors met their match in a few great naturalists who stayed at home. Many North American plants went to William Jackson Hooker at Kew; but the bulk of them during many years were classified by John Torrey.

Torrey brought to this work acuity of perception and a talent for organization (without which, indeed, it would not have been brought to him). Though he was not himself a field botanist, though he saw the western plants growing in their native places only after his work was done, he labored to good purpose; his classification has formed an adequate skeleton on which to drape the flesh of later research. His was a purely descriptive science. Inquiries into the physiology of plants, into causes and first principles, even into the Darwinian theories when they appeared, seem to have interested him little. But in the scope of his knowledge, in his mastery of detail, in his grasp of relationships, Torrey is entitled to first rank among the leaders in American botany.

Recognition was not slow in coming to such work, and both labor and glory grew at the geometrical rate of the traditional snowball. In his later years Torrey maintained a large correspondence with botanists all over the world. He was instrumental in the establishment of the United States National Herbarium, and was one